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Search History

DATE: Wednesday, June 22, 2005   Printable Copy   Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L21	(4953085 | 4722055 | 4744027 | 4744026 | 5148365 | 4346442 | 4642768 | 5101353 | 4674044 | 4694397 | 4752877 | 4797839 | 4744028)![PN]	25	L21
L20	('5799287'| '5148365')[PN]	4	L20
L19	('5799287'| '5148365')[URPN]	72	L19
L18	"dembo, ron".in.	8	L18
L17	L16 and 705/36	46	L17
L16	L15 and value	122	L16
L15	L12 and future	136	L15
L14	L12 and value	164	L14
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L12	(portfolio with scenarios or portfolio near scenarios)	192	L12
L11	L10 and value	73	L11
L10	L9 and future	73	L10
L9	L8 and disaggregat$	80	L9
L8	L7 and value	3981	L8
L7	portfolio	6636	L7
L6	L5 and disaggregat$	5	L6
L5	optimal near portfolio	98	L5

L4	705.clas.	34660	L4
L3	705/38	876	L3
L2	705/36	1247	L2
L1	705/35	2087	L1

END OF SEARCH HISTORY

US006799167B1

US 6,799,167 B1

(54) **DYNAMIC PORTFOLIO BENCHMARKING**

(75) Inventors: **David Gullen**, San Francisco, CA (US);
Lee Epstein, San Francisco, CA (US);
Christopher Stoddart, Woodside, CA
(US)

(73) Assignee: **Decision Analytics, Inc.**, San Francisco,
CA (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(56) **References Cited**

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6,240,399	B1	*	5/2001	Frank et al.	705/36
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Dahlquist et al., "Evaluating portfolio performance with
stochastic discount factors", The Journal of Business; Chi-
cago; Jul. 1999.*
Zargham et al., "A Web–based information system for stock
evaluation", Advance Issues of E–Commerce and Web–
Based Information Systems, WECWIS, 1999, International
Conference on Apr. 8–9, 1999, Santa Clara, CA, pp. 81–83.*

(List continued on next page.)

Primary Examiner—Jeffrey A. Smith
Assistant Examiner—Y. C. Garg
(74) *Attorney, Agent, or Firm*—Donald J. Lenkszus

(57) **ABSTRACT**

A benchmark portfolio is provided to be customizable to an
investment portfolio where the customization is dynamic.
Each customization can be recorded as a historical event,
and the investment return of the benchmark portfolio is
based on the recorded customizations. The benchmark port-
folio includes select asset classes, which include a sweep
account, where each asset class includes at least one security
that is representative of a set of specifically screened secu-
rities within the asset class.

27 Claims, 7 Drawing Sheets
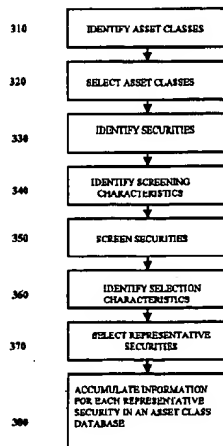
US006078905A

United States Patent [19]
Pich-LeWinter

[11] **Patent Number:** 6,078,905

[45] **Date of Patent:** Jun. 20, 2000

[54] **METHOD FOR OPTIMIZING RISK MANAGEMENT**

[76] Inventor: **Eva Pich-LeWinter**, 81900 Mountain View La., La Quinta, Calif. 92253

[21] Appl. No.: 09/049,690

[22] Filed: **Mar. 27, 1998**

[51] Int. Cl.^{7} G06F 17/60
[52] U.S. Cl. 705/36; 705/35; 705/38
[58] Field of Search 705/35, 36, 38

[56] **References Cited**

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4,953,085	8/1990	Atkins .	
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"Computers help manage cash flow, portfolios," Caribbean Business, p. 54,581 (abstract), Mar. 5, 1986.

Primary Examiner—James P. Trammell
Assistant Examiner—Nicholas David Rosen
Attorney, Agent, or Firm—Sofer & Haroon, LLP

[57] **ABSTRACT**

A method for optimizing a rate of return based on a bank's capital and loan products, comprises the creation of a plurality of arrays, comprising a passiva product array, an activa product array, a distribution array and a result array. Each passiva product array signifies a plurality of passiva products having a monetary value and an interest rate associated with it. Each activa product array signifies a plurality of activa products having a monetary value and an interest rate associated with it. The method further assigns to each activa product a plurality of eligible passiva products from the passiva product array, and a pre-determined maximum percentage of the activa product which may be financed by each of the eligible passiva products. For each activa product, enter on the distribution array, a single entry for each eligible passiva product. It calculates a maximum capital amount, a maximum interest amount and an available interest amount for each assignment made in the assigning step, selecting from the distribution array the largest the maximum interest amount.

The entries are processed depending on whether the monetary value of the eligible passiva article is less than the maximum capital amount for the selected single entry.

9 Claims, 4 Drawing Sheets
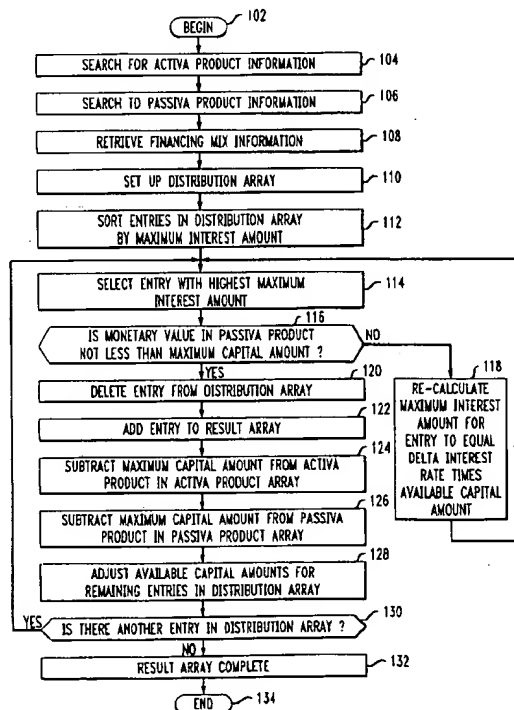
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L18: Entry 6 of 8   File: USPT   Sep 15, 1992

US-PAT-NO: 5148365
DOCUMENT-IDENTIFIER: US 5148365 A

TITLE: Scenario optimization

DATE-ISSUED: September 15, 1992

INVENTOR-INFORMATION:
NAME   CITY   STATE   ZIP CODE   COUNTRY
Dembo; Ron S.   Toronto, Ontario   CA

APPL-NO: 07/ 394081   [PALM]
DATE FILED: August 15, 1989

INT-CL: [05] G06F 15/20

US-CL-ISSUED: 364/402; 364/408
US-CL-CURRENT: 705/36R

FIELD-OF-SEARCH: 364/402, 364/401, 364/408

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

░░░░ Search Selected ░░░░ | ░░░░ Search ALL ░░░░ | ░░░░ Clear ░░░░

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4346442	August 1982	Musmanno	
☐	4642768	February 1987	Roberts	
☐	4674044	June 1987	Kalmus et al.	
☐	4694397	September 1987	Grant et al.	
☐	4722055	January 1988	Roberts	
☐	4744026	May 1988	Vanderbei	
☐	4744027	May 1988	Bayer et al.	
☐	4744028	May 1988	Karmarkar	
☐	4752877	June 1988	Roberts et al.	
☐	4797839	January 1989	Powell	364/554
☐	4953085	August 1990	Atkins	364/408

ART-UNIT: 236

PRIMARY-EXAMINER: Smith; Jerry

ASSISTANT-EXAMINER: Trammell; Jim

ATTY-AGENT-FIRM: Spencer, Frank & Schneider

ABSTRACT:

A method and apparatus are provided for optimally allocating available resources in a physical system defined by a mathematical model having parameters of uncertain values. The method comprises the steps of firstly assigning a value to each of the uncertain parameters in the mathematical model based on a scenario that may or is expected to occur. Thereafter, given the parameter values at each possible scenario, the mathematical model is solved to yield the best solution of the mathematical model for that scenario. Once this has been complete, a probability value representing the expected probability that the scenario will occur is assigned to each scenario solution. The scenario parameter values, scenario solutions and scenario probabilities are then used to determine a single solution to the mathematical model which best "fits" the desired system behavior under the uncertainty defined by all of the scenarios considered. The single solution is then used to allocate the resources in the system. The present method is particularly useful in modelling a target portfolio from a number of other financial instruments.

18 Claims, 10 Drawing figures

L18: Entry 5 of 8   File: USPT   Aug 25, 1998

US-PAT-NO: 5799287
DOCUMENT-IDENTIFIER: US 5799287 A

TITLE: Method and apparatus for optimal portfolio replication

DATE-ISSUED: August 25, 1998

INVENTOR-INFORMATION:
NAME   CITY   STATE   ZIP CODE   COUNTRY
Dembo; Ron S.   Toronto, Ontario   CA

APPL-NO: 08/ 866303   [PALM]
DATE FILED: May 30, 1997

PARENT-CASE:
This is a continuation of application Ser. No. 08/248,042, filed May 24, 1994, now
abandoned.

INT-CL: [06] G06 F 157/00

US-CL-ISSUED: 705/36
US-CL-CURRENT: 705/36R

FIELD-OF-SEARCH: 705/36, 705/37, 705/35, 395/925

PRIOR-ART-DISCLOSED:

                        U.S. PATENT DOCUMENTS

            | Search Selected | | Search ALL | | Clear |

      PAT-NO   ISSUE-DATE   PATENTEE-NAME   US-CL
□   4346442   August 1982   Musmanno   364/408
□   4642768   February 1987   Roberts   364/408
□   4674044   June 1987   Kalmus et al.   364/408
□   4694397   September 1987   Grant et al.   364/408
□   4722055   January 1988   Roberts   364/408
□   4744026   May 1988   Vanderbei   364/402
□   4744027   May 1988   Bayer et al.   364/402
□   4744028   May 1988   Karmarkar   364/402
□   4752877   June 1988   Roberts et al.   364/408
□   4797839   January 1989   Powell   364/554
□   4953085   August 1990   Atkins   364/408

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ART-UNIT: 274

PRIMARY-EXAMINER: McElheny, Jr.; Donald E.

ATTY-AGENT-FIRM: Kenyon & Kenyon

ABSTRACT:

A method and apparatus for determining an optimal replicating portfolio for a given target portfolio involves an initial step wherein a user defines a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. A representation of the trade-off between risk and expected profit for some arbitrary replicating portfolio is then determined and used to calculate a maximum risk-adjusted profit. The maximum risk-adjusted profit reflects that level of return that may be achieved with an optimum degree of risk; that is, it reflects that point in the risk/reward trade-off where a marginal cost of risk is equivalent to a marginal benefit attainable by assuming that risk. The method then uses the predefined set of available market instruments to identify a set of transactions that will create a replicating portfolio that will achieve the maximum risk-adjusted profit. The method and apparatus also derives the information required to compute a risk premium for pricing of portfolios in incomplete markets, and performs the computation.

12 Claims, 8 Drawing figures

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Search Results - Record(s) 1 through 8 of 8 returned.

☐ 1. Document ID: US 20010028369 A1

L18: Entry 1 of 8   File: PGPB   Oct 11, 2001

PGPUB-DOCUMENT-NUMBER: 20010028369
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010028369 A1

TITLE: Three dimensional spatial user interface

PUBLICATION-DATE: October 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gallo, Anthony Carmen	Toronto		CA	
Graham, Colin Eric	Toronto		CA	
Dembo, Ron	Toronto		CA	
Talbot, Jimmy Daniel	Toronto		CA	
Gallagher, Peter James	Toronto		CA	

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	COUNTRY	TYPE CODE
VIZIBLE.COM INC.				03

APPL-NO: 09/ 809330   [PALM]
DATE FILED: March 16, 2001

RELATED-US-APPL-DATA:
Application 09/809330 is a continuation-in-part-of US application 09/527917, filed March 17, 2000, PENDING
Application is a non-provisional-of-provisional application 60/266471, filed February 6, 2001,

INT-CL: [07] G06 F 3/00

US-CL-PUBLISHED: 345/848; 345/850
US-CL-CURRENT: 715/848

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A method and system of providing a three dimensional spatial user interface (SUI) to a user of a computing device. The SUI may be manipulated in three dimensions and contains a plurality of portals. A portal may contain a sensory cue that provides a reminder as to the content of the portal. Upon selection of a portal, an application program associated with the cue in the portal is invoked. Portals may also contain further instances of the SUI of the present invention, thus providing hierarchical depth. In the preferred

embodiment, the SUI is implemented as a sphere and may be viewed from an external or internal perspective.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima |

☐ 2.   Document ID: US 20010011243 A1

L18: Entry 2 of 8   File: PGPB   Aug 2, 2001

PGPUB-DOCUMENT-NUMBER: 20010011243
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010011243 A1

TITLE: Risk management system, distributed framework and method

PUBLICATION-DATE: August 2, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Dembo, Ron	Toronto		CA	
Adar, Alon	Toronto		CA	
Bartlett, Neil Edward	Toronto		CA	
Parkinson, Brian	Toronto		CA	
Perry, David	Toronto		CA	
Zerbs, Michael	Markham		CA	

APPL-NO: 09/ 811684   [PALM]
DATE FILED: March 20, 2001

RELATED-US-APPL-DATA:
Application 09/811684 is a continuation-of US application 09/323680, filed June 2, 1999, PENDING

INT-CL: [07] G06 F 17/60

US-CL-PUBLISHED: 705/36
US-CL-CURRENT: 705/36R

REPRESENTATIVE-FIGURES: 6

ABSTRACT:

A risk management system and method of determining a risk metric for a portfolio of instruments is provided. The system and method include a database wherein determined risk values for instruments in a set of instruments under each scenario can be maintained. At least one risk engine can be employed to determine values for the instruments and at least one aggregation engine can be employed to produce desired risk metrics for the set of instruments or a subset thereof. Each risk engine and each aggregation engine is connected to the database by an appropriate network.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima |

☐ 3. Document ID: US 6636246 B1

L18: Entry 3 of 8   File: USPT   Oct 21, 2003

US-PAT-NO: 6636246
DOCUMENT-IDENTIFIER: US 6636246 B1
** See image for **Certificate of Correction** **

TITLE: Three dimensional spatial user interface

DATE-ISSUED: October 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gallo; Anthony Carmen	Toronto			CA
Graham; Colin E.	Toronto			CA
Dembo; Ron	Toronto			CA
Talbot; Jimmy D.	Toronto			CA
Gallagher; Peter J.	Toronto			CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Vizible.com Inc.	Toronto			CA	03

APPL-NO: 09/ 527917   [PALM]
DATE FILED: March 17, 2000

INT-CL: [07] G06 F 3/00

US-CL-ISSUED: 345/805; 345/850, 345/746
US-CL-CURRENT: 715/805; 715/746, 715/850

FIELD-OF-SEARCH: 345/805, 345/782, 345/742, 345/743, 345/748-749, 345/803-804, 345/848-855, 345/653, 345/836, 345/441, 345/676-680, 345/744-747, 345/757

PRIOR-ART-DISCLOSED:

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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ART-UNIT: 2174

PRIMARY-EXAMINER: Sax; Steven

ATTY-AGENT-FIRM: Bereskin & Parr

ABSTRACT:

A method and system of providing a three dimensional spatial user interface (SUI) to a user of a computing device. The SUI may be manipulated in three dimensions and contains a plurality of portals. A portal may contain a sensory cue that provides a reminder as to the content of the portal. Upon selection of a portal, an application program associated with the cue in the portal is invoked. Portals may also contain further instances of the SUI of the present invention, thus providing hierarchical depth. In the preferred embodiment, the SUI is implemented as a sphere and may be viewed from an external or internal perspective.

23 Claims, 11 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw Desc | Ima |

☐ 4. Document ID: US 6278981 B1

L18: Entry 4 of 8   File: USPT   Aug 21, 2001

US-PAT-NO: 6278981
DOCUMENT-IDENTIFIER: US 6278981 B1

TITLE: Computer-implemented method and apparatus for portfolio compression

DATE-ISSUED: August 21, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dembo; Ron Samuel	Ontario			CA
Kreinin; Alexander Yacov	Thornhill			CA
Rosen; Dan	Toronto			CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Algorithmics International Corporation	Ontario			CA	03

APPL-NO: 09/ 084923   [PALM]
DATE FILED: May 28, 1998

PARENT-CASE:
This application claims priority to Provisional Application No. 60/057,927, filed May 29, 1997.

INT-CL: [07] G06 F 17/60

US-CL-ISSUED: 705/36
US-CL-CURRENT: 705/36R

FIELD-OF-SEARCH: 705/36, 705/37

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4346442	August 1982	Musmanno	364/408
4642768	February 1987	Roberts	364/408
4674044	June 1987	Kalmus et al.	364/408
4694397	September 1987	Grant et al.	364/408
4722055	January 1988	Roberts	364/408
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4953085	August 1990	Atkins	364/408
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5774880	June 1998	Ginsberg	705/36
5799287	August 1998	Dembo	705/36
5893079	April 1999	Cwenar	705/36

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ART-UNIT: 213

PRIMARY-EXAMINER: Hafiz; Tariq R.

ASSISTANT-EXAMINER: Meinecke-Diaz; Susanna

ATTY-AGENT-FIRM: Kenyon & Kenyon

ABSTRACT:

A computer-implemented method for compressing a portfolio of financial instruments is described. Financial instruments to be compressed are identified, and a compressed subportfolio corresponding to the identified financial instruments is generated. The compressed subportfolio and any non-compressed financial instruments are then combined into a compressed portfolio.

20 Claims, 7 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Ima

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    ☐ 5.   Document ID: US 5799287 A

L18: Entry 5 of 8   File: USPT   Aug 25, 1998

US-PAT-NO: 5799287
DOCUMENT-IDENTIFIER: US 5799287 A

TITLE: Method and apparatus for optimal portfolio replication

DATE-ISSUED: August 25, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dembo; Ron S.	Toronto, Ontario			CA

APPL-NO: 08/ 866303   [PALM]
DATE FILED: May 30, 1997

PARENT-CASE:
This is a continuation of application Ser. No. 08/248,042, filed May 24, 1994, now abandoned.

INT-CL: [06] G06 F 157/00

US-CL-ISSUED: 705/36
US-CL-CURRENT: 705/36R

FIELD-OF-SEARCH: 705/36, 705/37, 705/35, 395/925

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4346442	August 1982	Musmanno	364/408
4642768	February 1987	Roberts	364/408
4674044	June 1987	Kalmus et al.	364/408
4694397	September 1987	Grant et al.	364/408
4722055	January 1988	Roberts	364/408
4744026	May 1988	Vanderbei	364/402
4744027	May 1988	Bayer et al.	364/402
4744028	May 1988	Karmarkar	364/402
4752877	June 1988	Roberts et al.	364/408
4797839	January 1989	Powell	364/554
4953085	August 1990	Atkins	364/408
5101353	March 1992	Lupien et al.	705/37
5148365	September 1992	Dembo	364/402

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Ring, "Wells Fargo Gets Most New Business in Dynamic Wedging", Pensions & Investment Age, Feb. 9, 1987, p. 31.
Dembo et al., "Tracking Models and the Optimal Regret Distribution in Asset Allocation", Applied Stochastic Models and Data Analysis, 1990, vol. 8, pp. 151-157.
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Torres, "Mathematician Race to Develop New Kinds of Trading Instruments", The Wall Street Journal, Oct. 18, 1991.
Stoffman, "The Hedging Hotshot of Bay street", Dec. 1990, pp. 56-59.
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Dembo et al., "Protective Basket," Options, vol. 3, No. 2, Feb. 1990, pp. 25-28.

Dembo, "The Art of the Qptimum", Risk, vol. 3, No. 4, Apr. 1990, pp. 17-21.
Dembo et al., "Share the Load", Risk, vol. 4, No. 4, Apr. 1991, pp. 44-47.
Davidson, "Drawing on Data", Technology, pp. 49-53.
"The Cafe Behind the Hedge", Open Finance, Summer 1992.

ART-UNIT: 274

PRIMARY-EXAMINER: McElheny, Jr.; Donald E.

ATTY-AGENT-FIRM: Kenyon & Kenyon

ABSTRACT:

A method and apparatus for determining an optimal replicating portfolio for a given
target portfolio involves an initial step wherein a user defines a target portfolio to be
replicated, a set of available market instruments from which the replicating portfolio
may be created, a set of future scenarios, a horizon date, and a minimum profit to be
attained. A representation of the trade-off between risk and expected profit for some
arbitrary replicating portfolio is then determined and used to calculate a maximum risk-
adjusted profit. The maximum risk-adjusted profit reflects that level of return that may
be achieved with an optimum degree of risk; that is, it reflects that point in the
risk/reward trade-off where a marginal cost of risk is equivalent to a marginal benefit
attainable by assuming that risk. The method then uses the predefined set of available
market instruments to identify a set of transactions that will create a replicating
portfolio that will achieve the maximum risk-adjusted profit. The method and apparatus
also derives the information required to compute a risk premium for pricing of portfolios
in incomplete markets, and performs the computation.

12 Claims, 8 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw Desc | Ims |

　　　6.　Document ID:　US 5148365 A

L18: Entry 6 of 8   File: USPT   Sep 15, 1992

US-PAT-NO: 5148365
DOCUMENT-IDENTIFIER: US 5148365 A

TITLE: Scenario optimization

DATE-ISSUED: September 15, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dembo; Ron S.	Toronto, Ontario			CA

APPL-NO: 07/ 394081   [PALM]
DATE FILED: August 15, 1989

INT-CL: [05] G06F 15/20

US-CL-ISSUED: 364/402; 364/408
US-CL-CURRENT: 705/36R

FIELD-OF-SEARCH: 364/402, 364/401, 364/408

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4346442	August 1982	Musmanno	
4642768	February 1987	Roberts	
4674044	June 1987	Kalmus et al.	
4694397	September 1987	Grant et al.	
4722055	January 1988	Roberts	
4744026	May 1988	Vanderbei	
4744027	May 1988	Bayer et al.	
4744028	May 1988	Karmarkar	
4752877	June 1988	Roberts et al.	
4797839	January 1989	Powell	364/554
4953085	August 1990	Atkins	364/408

ART-UNIT: 236

PRIMARY-EXAMINER: Smith; Jerry

ASSISTANT-EXAMINER: Trammell; Jim

ATTY-AGENT-FIRM: Spencer, Frank & Schneider

ABSTRACT:

A method and apparatus are provided for optimally allocating available resources in a
physical system defined by a mathematical model having parameters of uncertain values.
The method comprises the steps of firstly assigning a value to each of the uncertain
parameters in the mathematical model based on a scenario that may or is expected to
occur. Thereafter, given the parameter values at each possible scenario, the mathematical
model is solved to yield the best solution of the mathematical model for that scenario.
Once this has been complete, a probability value representing the expected probability
that the scenario will occur is assigned to each scenario solution. The scenario
parameter values, scenario solutions and scenario probabilities are then used to
determine a single solution to the mathematical model which best "fits" the desired
system behavior under the uncertainty defined by all of the scenarios considered. The
single solution is then used to allocate the resources in the system. The present method
is particularly useful in modelling a target portfolio from a number of other financial
instruments.

18 Claims, 10 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw Desc | Ims |

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    7.   Document ID: WO 9854666 A1
    L18: Entry 7 of 8   File: EPAB   Dec 3, 1998

PUB-NO: WO009854666A1
DOCUMENT-IDENTIFIER: WO 9854666 A1
TITLE: COMPUTER-IMPLEMENTED METHOD AND APPARATUS FOR PORTFOLIO COMPRESSION

PUBN-DATE: December 3, 1998

INVENTOR-INFORMATION:

NAME	COUNTRY
DEMBO, RON S	CA
KREININ, ALEXANDER Y	CA
ROSEN, DAN	CA

ASSIGNEE-INFORMATION:

NAME	COUNTRY
ALGORITHMICS INC	CA
DEMBO RON S	CA
KREININ ALEXANDER Y	CA
ROSEN DAN	CA

APPL-NO: CA09800519
APPL-DATE: May 29, 1998

PRIORITY-DATA: US05092797P (May 29, 1997)

INT-CL (IPC): G06 F 17/60
EUR-CL (EPC): G06F017/60; G06F017/60

ABSTRACT:

CHG DATE=19990905 STATUS=O>A computer-implemented method for compressing a portfolio of financial instruments is described. Financial instruments to be compressed are identified, and a compressed subportfolio corresponding to the identified financial instruments is generated. The compressed subportfolio and any non-compressed financial instruments are then combined into a compressed portfolio.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw Desc | Ima |

☐ 8. Document ID: EP 686926 A2

L18: Entry 8 of 8   File: EPAB   Dec 13, 1995

PUB-NO: EP000686926A2
DOCUMENT-IDENTIFIER: EP 686926 A2
TITLE: Method and apparatus for optimal portfolio replication

PUBN-DATE: December 13, 1995

INVENTOR-INFORMATION:

NAME	COUNTRY
DEMBO, RON S	CA

ASSIGNEE-INFORMATION:

NAME	COUNTRY
DEMBO RON S	CA

APPL-NO: EP95303465
APPL-DATE: May 23, 1995

PRIORITY-DATA: US24804294A (May 24, 1994)

INT-CL (IPC): <u>G06</u> <u>F</u> <u>17/60</u>
EUR-CL (EPC): G06F017/60

ABSTRACT:

The disclosure relates to a method and apparatus for determining an optimal replicating portfolio for a given target portfolio involves an initial step wherein a user defines a target portfolio to be replicated, a set of available market Instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. A representation of the trade-off between risk and expected profit for some arbitrary replicating portfolio is then determined and used to calculate a maximum risk-adjusted profit. The maximum risk-adjusted profit reflects that level of return that may be achieved with an optimum degree of risk; that is, it reflects that point in the risk/reward trade-off where a marginal cost of risk is equivalent to a marginal benefit attainable by assuming that risk. The method then uses the predefined set of available market instruments to identify a set of transactions that will create a replicating portfolio that will achieve the maximum risk-adjusted profit. The method and apparatus also derives the information required to compute a risk premium for pricing of

portfolios in incomplete markets, and performs the computation.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw Desc | Clip |

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Terms	Documents
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